



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

You Ain't Seen Nothin' Yet

Jeffrey S. Merrifield

Commissioner

U. S. Nuclear Regulatory Commission

NRC Regulatory Information Conference

March 13, 2007



A Decade of Changes

License Renewal

Decommissioning

**Risk-informed
Regulations**

Nuclear Security



**Commissioner
Merrifield - 2007**

New Reactors

**Legal Reform – Alternate
Dispute Resolution**

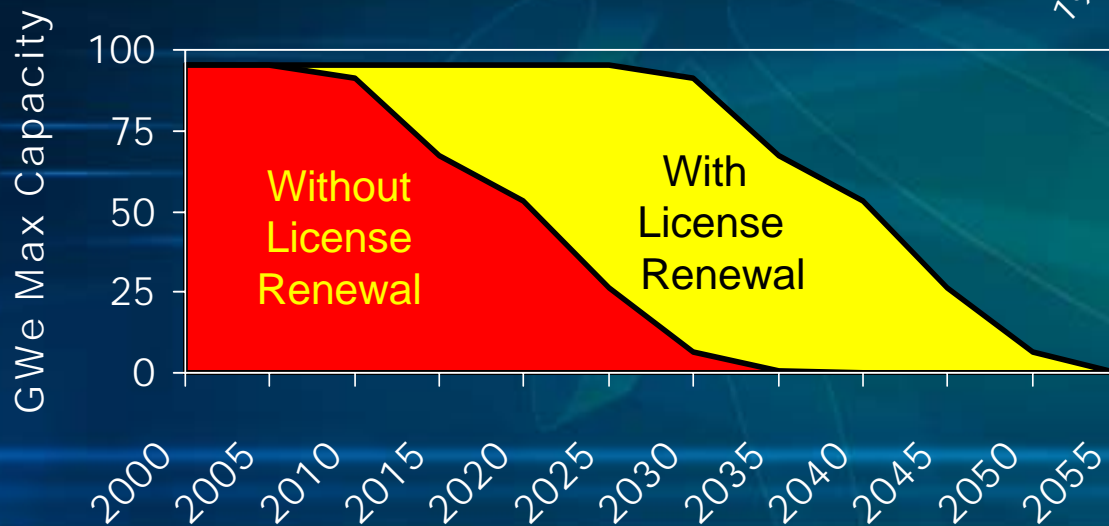
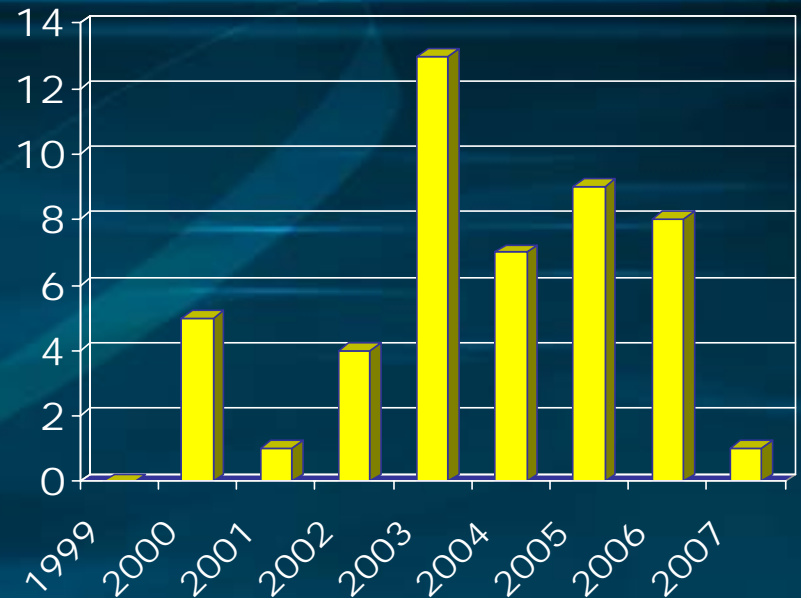
**International
Partnerships**

Communications



License Renewal Progress

NRC has approved 20-year license extensions for 48 units since 2000 (8 are pending in 2007)



U.S. nuclear plants will provide energy until 2055, if extensions for all 104 existing units are approved



A Decade of Changes



Decommissioning

- Improved regulation of legacy waste
- Solid foundation for future reactors

Reformed Legal Process

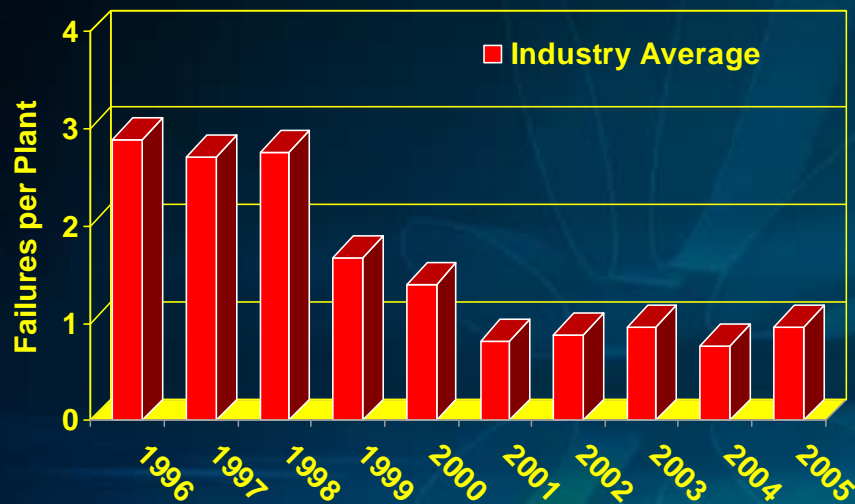
- New cadre of judges
- Revised Part 2
- Alternate Dispute Resolution





A Decade of Changes

Safety System Failures



Risk - Informed Regulation

- New reactor oversight process
- NFWA 805
- Maintenance rule

International Partnerships

- Tri-lateral agreement
- Convention on Nuclear Safety
- International Atomic Energy Agency





A Decade of Changes

Communications

with the public,
media, and the
world



Nuclear Security

Most secure civilian infrastructure
before and after 9/11/01

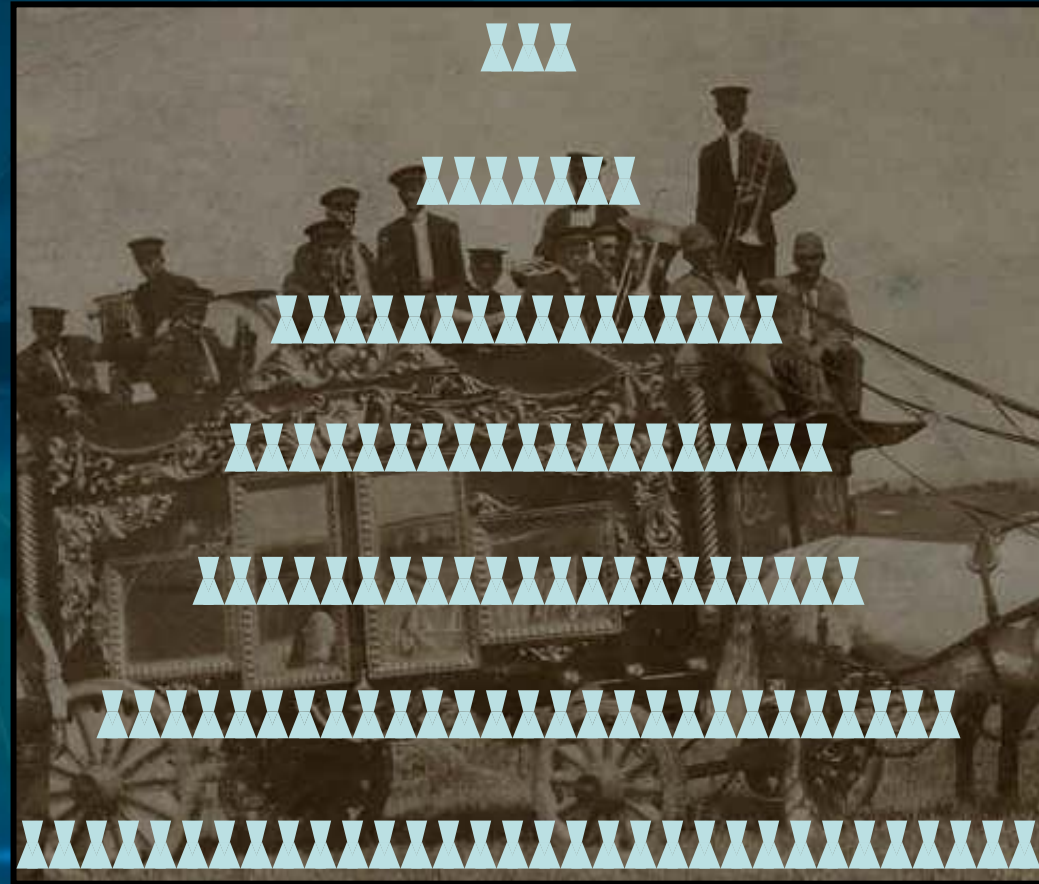




The Nuclear Bandwagon

Letters of intent to apply for a new reactor license:

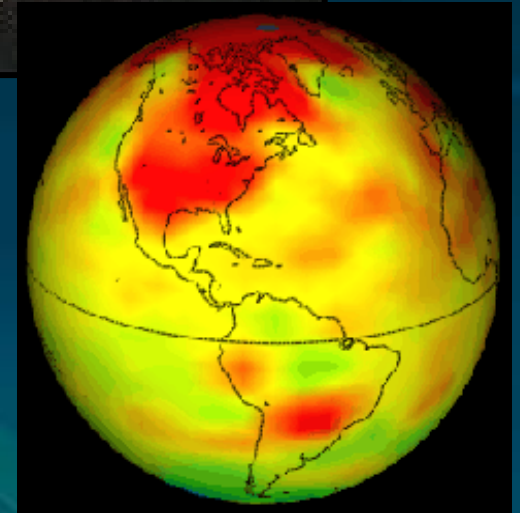
- December 2004 -- 3
- August 2005 -- 7
- November 2005 -- 16
- December 2005 -- 19
- April 2006 -- 21
- August 2006 -- 27
- March 2007 -- 32





Time for New Nuclear Plants?

- Global warming - today's number one environmental issue
- Renewable power will play a role, but still a long way off
- Cap and trade emissions program or carbon tax?



Nuclear power is the largest carbon-friendly source for baseload generating capacity



Nuclear Renaissance?

The number of U.S. nuclear power plants could potentially double in the next 30 years.





Merrifield's New Reactor Task Force

Goal: identify process improvements
to reduce COL review schedules

Comprised of 10 senior NRC managers
and staff

Recommendations to Chairman
by the end of March 2007



New Reactor Task Force

- Environmental review process
- Hearing process
- Licensing review process





Environmental Review Challenges

- The environmental process to satisfy NEPA is:
- unnecessarily long
- too focused on potential litigation
- beyond the original intent of Congress





Hearing Process Challenges

- Mandatory hearing process is broken
- Congress should repeal mandatory hearing requirements
- Commission-led legislative-style hearings, if necessary





COL Review Process Challenges

Licensing review process

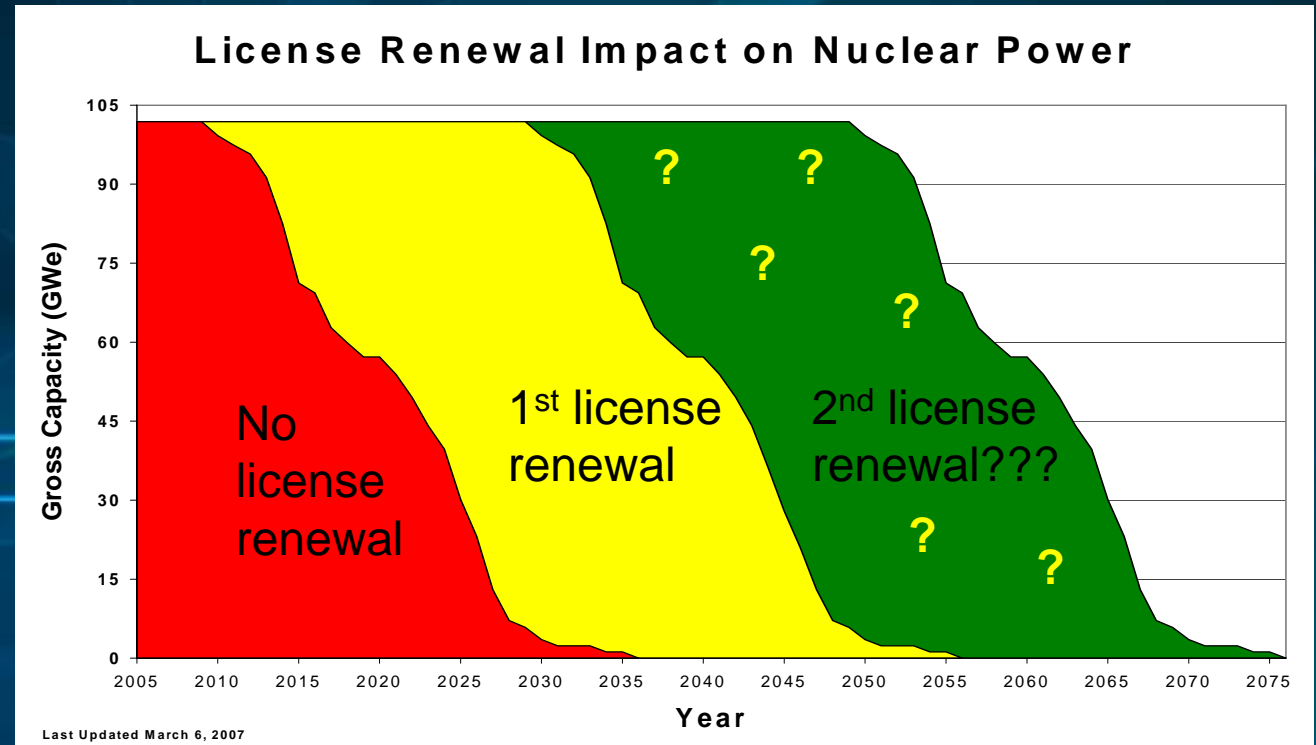
- Too long
- Too cumbersome
- Goal should be 24 – 26 months, after initial COL application reviews are complete





License Renewal

- Potential secure energy resource for future generations
- Technical challenges: Cables, Materials, Instrumentation
- 80 years of operation may be possible
- NRC needs to prepare licensing framework



- Could spur long-term financing for plant upgrades



High Level Waste

- No real solution? – wrong!
- Yucca Mountain is licensable
- Need proper project management



Spent fuel can be stored safely at new or current sites



International Partnerships

Thailand

Indonesia

Chile

Belarus

Egypt

Nigeria

Vietnam

Burma

Poland

Italy

Israel

Jordan

Morocco

Malaysia

Venezuela

Estonia

Turkey

Namibia

Qatar



International Partnerships

NRC must be proactive to help strengthen nuclear safety worldwide



We can learn from our partners

- CNS, IAEA, NEA



Conclusion



- A decade of extraordinary change and renewal at the NRC
- NRC is second-to-none in pursuit of regulatory excellence
- Enormous challenge to prepare for potential doubling of the nuclear power plant fleet
- Potential extension of license to 80 years and high level waste resolution
- Leaving a solid foundation for NRC's future



...the End...
...and I feel fine!

Jeffrey S. Merrifield
Commissioner
U. S. Nuclear Regulatory Commission

NRC Regulatory Information Conference
March 13, 2007